



Information Technology Laboratory

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MPLS Module - MPLS Mgmt Module Description

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Contents

1. MPLS Management Module.....	5
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Figures

1. MPLS Management Module

MPLS Management module consists of four modules: MPLSForwarding, MPLSForwardingTable, MPLSInterfaceMgmt, and MPLSSignalingInterfaceMgmt.

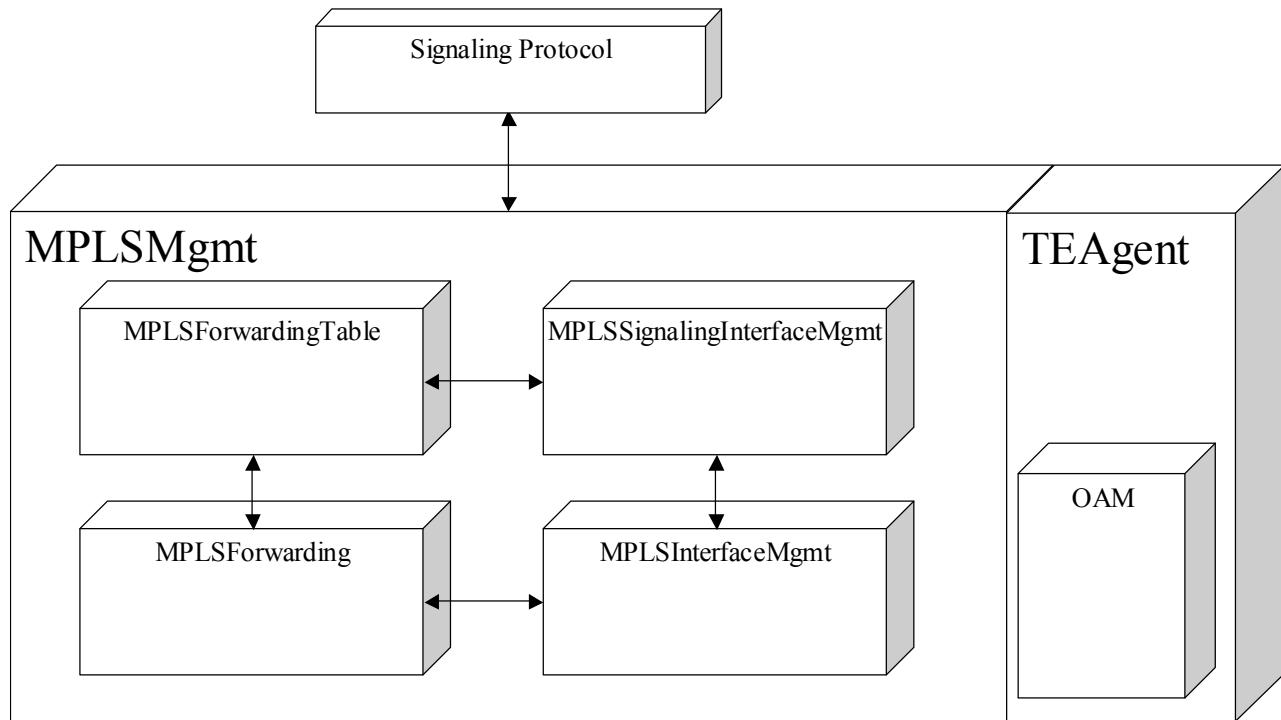


Figure 1 Block Diagram of MPLS Management module

MPLSMgmt module plays a key role in MPLS function. It configures the four sub modules and configures queue and scheduler. It receives the signaling information from the Signaling protocol and delivers it to the MPLSSignalingInterfaceMgmt module. It also supports label stacking function to provide the label stacking at Optical edge or tunneled LSP. According to the existence of OXC module in local node, it is determined that whether this node is OXC or LSR.

In configuration phase, it set four sub-modules' debug flag and configure the queue and the scheduler that is used to queue and schedule the MPLS packet. Because this module is configured after lower layer configuration is done, it starts the configuration of own module after 1.0 second. After configuration of own module, it triggers the timer after 2.0sec to configure four sub-modules.

When the lower layer(IP layer) receives a MPLS packet, it delivers the received packet to the upper layer(MPLSMgmt module). When this module receives the MPLS packet it send it to the MPLSForwarding module to do forwarding scheme of MPLS module.